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August A. Busch
Memorial
Wildlife Area

Nature's Community Development

A guide
to how
plants &
animals
grow up
together

[illegible]

WITHDRAWN from MSU-WP Garnett
**MSU-WEST PLAINS
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Introduction

An oil painting of a landscape remains forever the same, but a landscape in the natural world is forever changing. By following the numbered markers and reading this leaflet, you can discover how people, plants and animals are involved in this transformation.

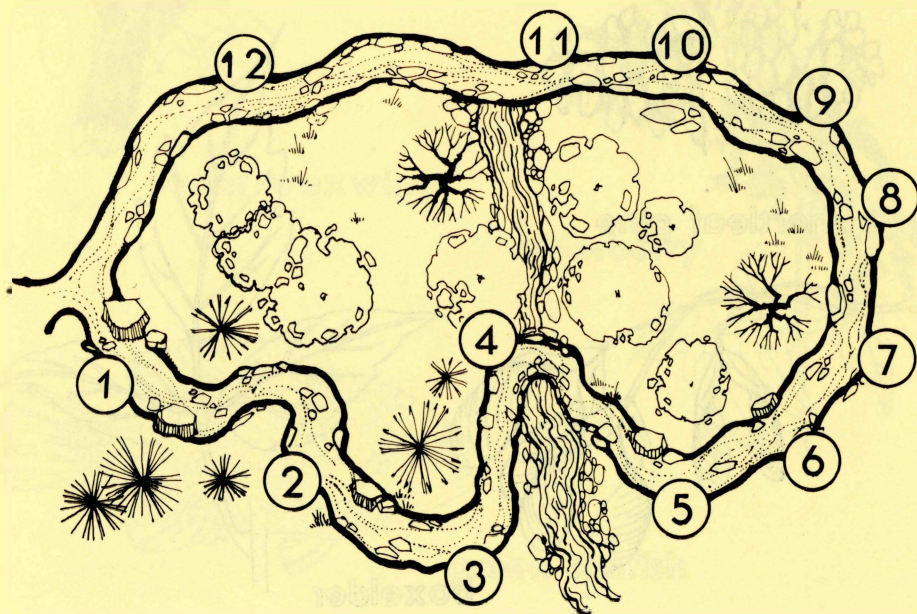
Please, help us protect this area by taking litter back with you and by leaving plants and animals where you find them.

It takes about 40 minutes of relaxed walking to complete this 0.7 mile trail.

Publications concerning natural history and conservation are available at the Busch Area office.

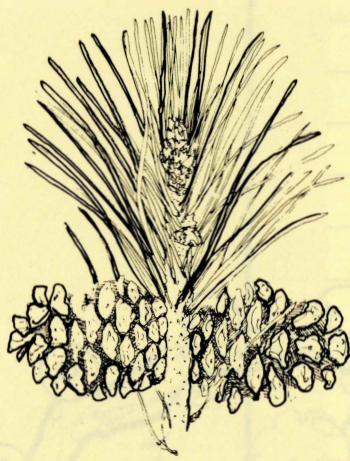
For further information about naturalist activities, see the bulletin boards.

If you have no further use for this brochure, please return it and help us conserve paper.



1. Southern Transplants

A pine forest has a special sound and scent. The natural home of shortleaf pine is southern Missouri. These grow here only because we planted them to provide scenery and wildlife cover. Without man's interference, the natural community will direct its own development through a series of changes that affects plants, animals and people.



shortleaf pine



boxelder

2. Natural Reconstruction

This bottomland was cleared by man, but nature is redeveloping the community as trees like this boxelder replace the shrubs. The woodcock is among the animals that need this kind of environment. It struts among the moist thickets, probing its long bill into the rich soil in search of worms.



woodcock



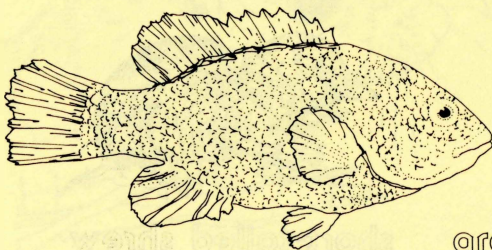
3.

Sunshine & Berries

Can you guess what happened to Virginia pines that we planted? After they fell, increased sunlight reaching the ground encouraged the growth of elderberry, raspberry and pokeweed. They will provide food for fruit-eating animals. In time, bottomland trees like the boxelder will crowd out these berry-producing shrubs.



cedar waxwing



green sunfish

4.

Forest Water

The stable forest soil keeps this stream clear and flowing all year. If you stand still, you might see some wildlife. Clear stream animals find homes in pools like this one scoured out around this hackberry's roots.



pokeweed

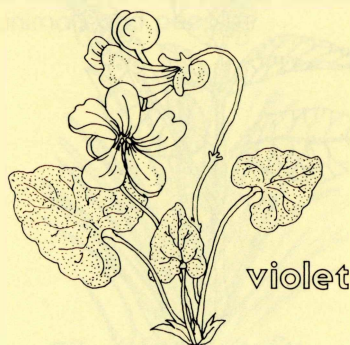


elderberry

5.

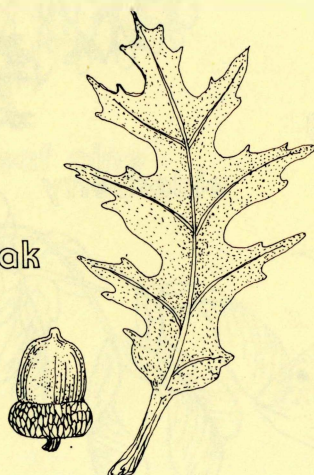
Layers of Life

This upland oak-hickory forest is a little like an apartment house. The top floor consists of big trees like this red oak. Small trees, like this black-haw, support the next floor. Violets, bellworts and snake-root grow at ground level. Different kinds of animals find homes at different levels.



violet

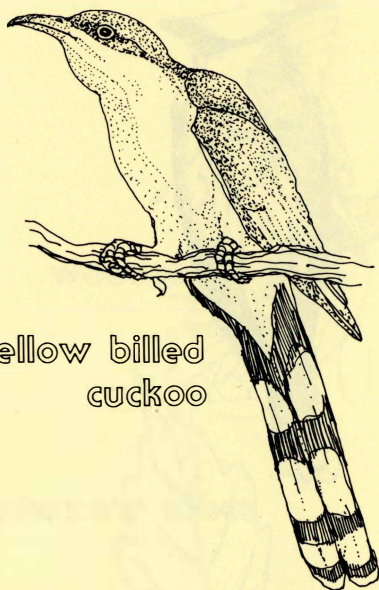
red oak



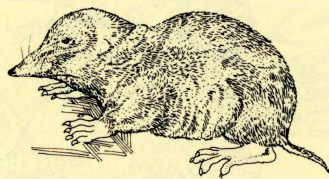
6.

Woodland Sanctuary

The diverse forest community, dominated by long-lived trees like this red oak and shag-bark hickory, can last for centuries. Within this stable environment, wildlife finds cover from predators and extremes in rain, wind and temperature. This particular oak shelters a hive of honey bees.



yellow billed
cuckoo



short-tailed shrew

7. A Manmade Community

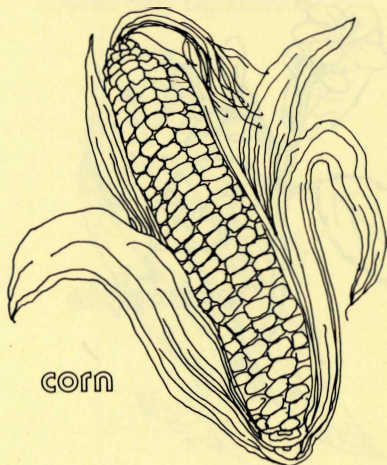
This land, once covered with forest, was cleared and is now plowed for crops. Cultivated grasses and legumes provide much more food for people and their livestock than a forest provides. But do you see much wildlife cover on cropland? Wildlife common on cropland includes mice and grasshoppers.



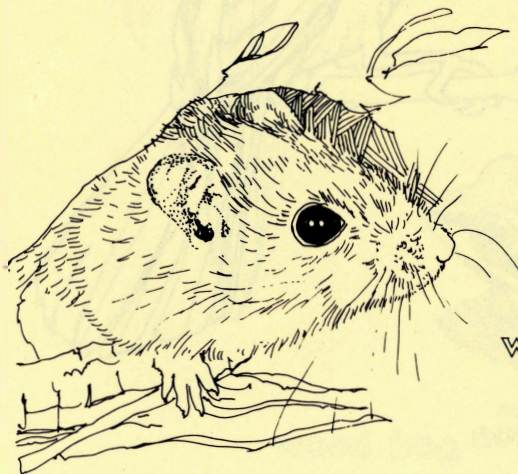
red clover

8. Nature Takes Over

Looking east you can contrast cultivated cropland on the right with an uncultivated field on the left. When plowing ceases, the natural community develops more diversity with plants like goldenrod, broomsedge, aster and partridge pea. More wildlife is able to find homes in this more stable environment.



corn

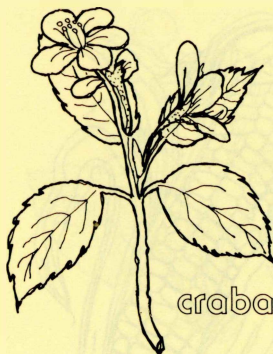


white-footed mouse

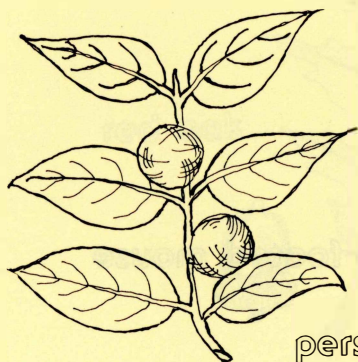
9.

Growing
Up

In time, the field plants alter conditions so that trees like persimmon (left) and crab apple (right) can grow. These trees crowd out many field plants, but help create a more diverse community. In turn, these small, short-lived trees prepare the way for the final stage of community development.



crabapple



persimmon

10.

The Final
Product

The final stage is the forest. If undisturbed, the natural community develops in a predictable sequence from the early, productive stages toward the mature, diverse and more stable stage. This process is called SUCCESSION.

You might find a 100-year-old shingle oak like this one in your yard if you stopped mowing for 120 years.



cardinal

11. Mix Well for Best Results

Early stages, whether field or cropland, are characterized by grasses (corn, broomsedge, etc.). They provide much food. However, both people and wildlife need the stability and cover of mature stages. A mixture, like this field surrounded by woodland, can provide both food and cover.

broomsedge



wood frog



12. Everyone Needs A Home

The elevated railroad bed you just walked over used to transport explosives (remember the water hydrant?). Now nature is reclaiming it for wildlife. By allowing natural communities to occupy portions of the landscape—as we did here—we can help reverse the trend of destruction of wildlife habitat caused by roads, houses and agriculture.



barn owl

guided or
self-guiding
tours
are available
at these
department
areas

Headquarters
2901 S. Ten Mile Dr.
Jefferson City 65101
314/751-4115

Rockwoods Reservation
Route 1
Glencoe 63038
314/273-5436

Shepherd of the Hills Hatchery
P.O. Box 427
Branson 65616
417/334-4865

James A. Reed Memorial Wildlife Area
Rt. 3, Box 10
Lee's Summit 64063
816/524-1656

Taberville Prairie
office: 123 E. Jefferson
Clinton 64735
816/885-5633

Little Dixie Nature Trail
(Wheelchair Accessible)
office: Rt. 5
Fulton 65251
314/642-3816

